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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/790,040	03/02/2004	Kenichi Ao	01-561	9741

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EXAMINER	
AURORA, REENA	
ART UNIT	**PAPER NUMBER**
2862	

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/790,040	AO, KENICHI	
	Examiner	Art Unit	
	Reena Aurora	2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 14* is/are pending in the application.

4a) Of the above claim(s) *7 - 14* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 6* is/are rejected.

7)☒ Claim(s) *2* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *02 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *3/2/04*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1 – 6 are presented for examination.

Claims 7 – 14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 07/26/05.

Applicant's election of invention I with traverse in the reply filed on 07/26/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Objections

Claim 2 is objected to because of the following informalities: line 2, the phrase "the position" lacks antecedent basis. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 62-201957.

As to claim 1, JP 62-201957 (hereinafter JP'957) discloses a mold-type magnetic resistance element as detecting sensor including a magnetic sensor chip (2, fig. 1); a chip mounting member (1) on which the magnetic sensor chip (2) is mounted; an adhesive material (5, fig. 3) for bonding the magnetic sensor chip (2) to the chip mounting member (1); an encapsulating material (4, fig. 1 and 2) for encapsulating the magnetic sensor chip (2); and a magnetic-field generating portion formed by magnetizing (6, fig. 3) at least one of the chip mounting member, the adhesive material (5), and the encapsulating material.

As to claim 2, JP'957 further discloses that the encapsulating material (4) is magnetized (Note fig. 1, the magnetized encapsulating material on top of the magnetic sensor chip) at a portion opposite to the position at which the magnetic sensor chip (2) is mounted (1) (Note page 5, lines 12 - 17).

As to claim 3, JP'957 further discloses that the encapsulating material (4) is magnetized at a portion that is located on a side of the magnetic sensor chip (2) (Note fig. 2, the magnetized encapsulating material on a side of the magnetic sensor chip) (Note page 5, lines 12 - 17).

As to claim 5, JP'957 further discloses that the adhesive material (5, fig. 3) is formed on a surface (1) on which the magnetic sensor chip (2) is mounted, and is entirely magnetized.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 62-201957 in view of Masahisa (JP 62-250784).

As to claim 4, JP'957 fails to show that the chip mounting member is magnetized at a portion on which the magnetic sensor chip is mounted. Masahisa discloses a magnetoresistance element wherein the chip mounting member (substrate 3, fig. 1) is magnetized (note abstract 2nd para lines 6 - 8) at a portion on which the magnetic sensor chip (2) is mounted to provide the bias magnetic field. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of JP'957 in view of the device of Masahisa such that magnetizing a portion of the chip mounting member (substrate 3) on which the magnetic sensor chip is mounted in order to provide bias magnetic field to the sensor in place of using a magnet to provide bias magnetic field to the sensor and therefore decreasing the size of the device.

As to claim 6, JP'957 discloses a mold-type magnetic resistance element as detecting sensor including a magnetic sensor chip (2, fig. 1); a chip mounting member (1), for mounting the magnetic sensor chip (2) thereon; a magnetized adhesive material (5, 6) for bonding the magnetic sensor chip (2) to the chip mounting member (1); and an

encapsulating material (4) for encapsulating the magnetic sensor chip (2) therein, the encapsulating material (4) having a magnetized portion (Note fig. 1, the magnetized encapsulating material on top of the magnetic sensor chip, which is a surface opposite to the mounting surface (bottom surface of the magnetic sensor chip) of the magnetic sensor chip) on a surface opposite to the mounting surface of the magnetic sensor chip (2) on the chip mounting member (1) (Note page 5, lines 12 – 17) and an encapsulating material (4) corresponding to the chip-mounting member (1, fig. 1) JP'957 fail to show a magnetized portion on which the magnetic sensor chip is mounted. Masahisa discloses a magnetoresistance element wherein the chip mounting member (substrate 3, fig. 1) is magnetized (note abstract 2nd para lines 6 - 8) at a portion on which the magnetic sensor chip (2) is mounted to provide the bias magnetic field. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the device of JP'957 in view of the device of Masahisa such that magnetizing a portion of the chip mounting member (substrate 3) on which the magnetic sensor chip is mounted in order to provide bias magnetic field to the sensor in place of using a magnet to provide bias magnetic field to the sensor and therefore decreasing the size of the device.

Prior Art of Record

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Van De Walle et al. (5,583,436) is cited for its disclosure of a miniature magnetic sensor with compact magnetization coil.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Reena Aurora
Examiner